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ABSTRACT

Applied psychologists who provide services in nations composed of multiple and varied cultural groups face certain ethical dilemmas that would not arise in more homogeneous societies. These ethical dilemmas revolve around the concept of population validity. Population validity refers to the generalizability of research findings across different populations. In applied psychology, it emerges as an ethical issue because, in the absence of evidence of population generalizability, it is not possible to predict the outcome of a research application in a population different from that which yielded the research findings. The ethical question for the applied psychologist centers on whether or when it is within the bounds of professional ethics to recommend or implement treatment when the scientific basis that lends validity to the application is based on research from sociocultural populations that differ from that of the intended service receivers. A framework for approaching the dilemma is proposed that includes: (1) scrutiny of the empirical evidence; (2) examination of plausible rational justifications; and (3) design of experimental applications to test the hypothesis of population generalizability. (Contains six references.) (SLD)

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POPULATION GENERALIZABILITY AND ETHICAL DILEMMAS IN RESEARCH, POLICY, AND PRACTICE: PRELIMINARY CONSIDERATIONS

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Princeton, New Jersey
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*Invited paper presented in a symposium, "Confronting Ethical Dilemmas in Applied Developmental Psychology" (W. W. Tryon, chairman), 95th Annual Convention of the American Psychological Association, New York City, August 31, 1987.

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Population Generalizability and Ethical Dilemmas in Research, Policy, and Practice: Preliminary Considerations*

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Applied psychologists who provide services in nations composed of multiple and widely varied cultural groups, such as the United States, face certain ethical dilemmas that would not arise in more homogeneous societies. These ethical dilemmas, the focus of this paper, revolve around the concept of population validity.

Population validity refers to the generalizability of research findings across different populations. In this regard it is important to keep in mind that a research finding is an interpretation of data obtained from a sample representing a particular population (Messick, 1975). A measure of a psychological construct may or may not have the same or even similar psychometric properties or patterns of relationships with other variables in different populations (Laosa, 1981). Thus, an inference may be valid for one population and not for another; an inference is valid for a particular population to the extent that it leads to correct judgments about members of that population (Breland, 1979).

To illustrate the issue, consider the recent research literature concerning the effects of classroom processes on students' development. This research area is not only of interest to applied psychologists, but recently it also has attracted the close attention of policymakers. Roused by the

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educational excellence movement, policymakers are now turning to this literature in their search for ways to improve the U.S. educational system in relation to those of ascending nations (see, e.g., U.S. Department of Education, 1986).

Research during the past 15 years on the linkages between teacher behaviors in the classroom and their students' development of academic skills in the elementary grades has produced a small knowledge base concerning the dynamics of classroom processes and how such processes may affect children's learning and development. In their recent review of this literature, Brophy and Good (1986) concluded that even the most widely replicated findings on the relationships between classroom processes and students' educational development must be qualified by references to statistical interactions. Usually, these interactions involve minor elaborations of main trends, but occasionally interactions are more powerful than main effects. Such interactions, some of which appear repeatedly and thus constitute well-established findings, suggest that the effects on children of particular instructional environments vary as a function of the child's characteristics. Some of these characteristics stem from the child's sociocultural background.

A recent study by Wong Fillmore and her colleagues (1985) illustrates the nature of such interactions. It is one of several studies commissioned by the then National Institute of Education with the goal of determining, through research, how best to meet the educational needs of children in the United States with limited English-language proficiency. The study was designed to determine what aspects of classroom structure, teaching practices, and patterns of language use in the classroom had the strongest impact on the child's English language development over the course of the school year. The analyses examined the oral English language development of

elementary school children from two different ethnic groups--Chinese and Hispanic.

A main effect in the data showed that children who initially had low proficiency in English made large gains in oral language development if they had been placed in classrooms where they had numerous opportunities to interact with native English-speaking peers; such peer interactions appeared to be less crucial once the children were further along in their learning of English. Further analyses revealed, however, that these results were true to a much greater extent for Hispanic than for Chinese children. Chinese children whose initial knowledge of English was limited and who were in classes in which there were many opportunities to interact with native English-speaking classmates did not show the kind of improvement in English-language skills found among the Hispanic children in such situations. Chinese children developed better in classrooms where teachers closely supervised the learning activities of students and kept them on task. Wong Fillmore et al. concluded that "the Chinese children seemed much more directly dependent on their interactions with the teacher than was the case for the Hispanic children" (p. 331). It is as if the Chinese children viewed the adult authority figure as the source of knowledge, whereas the Hispanic children profited from the chance to interact with peers who were good language models. Thus it seems that different kinds of instructional approaches work best with different cultural groups. Had the researchers included only a single ethnic group in their study or had they aggregated the groups in their analyses, the important statistical interaction--and thus the helpful finding bearing on population generalizability-- would have been masked.

In the realm of basic psychological research, population generalizability remains a scientific issue. In applied psychology, by contrast, population generalizability emerges as an ethical issue. It is an ethical issue because in the absence of evidence regarding population generalizability, we cannot predict the outcome of a research application to a population different from that which yielded the research finding. The outcome of the application might differ from that intended--it might be ineffective and harmless or possibly harmful in a different population. Thus, an ethical question for the applied psychologist centers on whether--or under what circumstances--it is within the bounds of professional ethics to devise, recommend, or implement a treatment or other psychological service or intervention when the scientific basis lending validity to the application stems from research on sociocultural populations different from those of the intended service receivers.

Efforts to apply research findings to policy or practice should be predicated, therefore, on answers to these questions: Is the application directed at the same population that yielded the research findings? If not, what evidence is there to justify directing the application to members of this population?

Given the emerging evidence regarding the perils involved in generalizing research findings across populations, what is the applied psychologist to do in the absence of scientific information pertaining specifically to the client's sociocultural background? Is it preferable in such circumstances to abstain from intervention in order to avoid potential or unknown risks? Should one treat the client in the same manner as one would someone from a population about which there are relevant data--and hope that the outcome will be the same in both populations? How can the level of

decision-making in such cases be improved?

Given the growing cultural diversity in this society, these knotty ethical issues are bound to arise with increasing frequency, and a framework for dealing with them is therefore needed. What should the outline of this framework be? The framework should be one in which the ethical dilemmas discussed here are dealt with in the context of an ongoing interplay between research and application. This framework should include three basic elements: (a) a scrutiny of the empirical evidence that justifies a particular application to members of a specific population; but, in the absence of this evidential basis, (b) an examination of plausible rational justifications, and (c) the design of experimental applications intended to test the hypothesis of population generalizability through evaluation research.

Summary

My first aim in this paper has been to raise the consciousness level of applied psychologists with regard to a particular set of ethical issues that arise in societies composed of diverse cultural groups. These ethical dilemmas revolve around the concept of population validity, which refers to the generalizability of research findings across different populations. I also have proposed here the broad outline of a framework for dealing with these ethical dilemmas in the context of an ongoing interplay between research and application.

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